ABSTRACT OF THE DISCLOSURE

An object of this invention is to eliminate the need for any analytic function and maximize the contrast of an image after gray level conversion. To accomplish this, an image processing apparatus which executes image processing for a radiographical image obtained by converting, into an electrical signal, an intensity distribution of radiation that is radiated to an object and has passed through at least the object, includes a defining unit for defining a gray level conversion curve to be used for gray level conversion on the basis of the contrast of the image after gray level conversion of the radiographical image, and a gray level conversion unit for converting the gray level of the radiographical image by using the gray level conversion curve defined by the defining unit.